Appl. No. 10/672,700 IDS dated May 3, 2007

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Eduard K. de Jong

Assignee: Sun Microsystems, Inc.

Title: PERMUTATION OF OPCODE VALUES FOR APPLICATION

PROGRAM OBFUSCATION

Serial No.: 10/672,700

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Filed:

September 25, 2003

2135

Examiner: April Ying Shan Group Art Unit:

Docket No.: SUN040023

Monterey, CA May 3, 2007

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

05/08/2007 TNGUYEH2 00000046 10672700

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UNDER \$1.97(c) WITH FEE

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant(s) wish to call the following documents (a copy of each non-US Patent document is enclosed) to the attention of the Examiner.

U.S. PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	NAME			
1) /	AS/	4,434,436	02/28/84	Kleykamp et al.			
2)		5,913,064	06/15/99	Chen			
3)	6,098,056 0		08/01/00	Rusnak et al.			
4)	6,101,606		08/08/00	Diersch et al.			
5)	5) 6,175,9		01/16/01	Nardone et al.			
6)		6,178,509	01/23/01	Nardone et al.			
7)		6,205,550	03/20/01	Nardone et al.			
8)		6,266,416 07/24/01		Sigbjømsen et al.			
9)		6,289,455	09/11/01	Kocher et al.			

10) /AS/	6,308,256	10/23/01	Folmsbee
11)	6,334,189	12/25/01	Granger et al
12)	6,374,402	04/16/02	Schmeidler et al.
13)	6,449,721	09/10/02	Pensak et al.
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19)	6,668,325	12/23/03	Collberg et al.
20)	6,779,114	08/17/04	Chow et al.
21)	6,862,683	03/01/05	Wille et al.
22)	6,966,002	11/15/05	Torrubia-Saez
23)	6,981,217	12/27/05	Knauft et al.
24)	7,017,188	03/21/06	Schmeidler et al.
25)	7,054,443	05/30/06	Jakubowski et al
26)	7,065,652	06/20/06	Xu et al.
27)	7,080,039	07/18/06	Marsh
28)	7,089,594	08/08/06	Lal et al.
29)	7,124,445	10/17/06	Cronce et al.
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31)	7,150,003	12/12/06	Naumovich et al.
32)	2002/0184618	12/05/02	Bala et al.
33)	2003/0093685	05/15/03	Tobin
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35)	2003/0172270	09/11/03	Newcombe et al.
36)	2003/0177391	09/18/03	Ofek et al.
37)	2003/0188187	10/02/03	Uchida
38)	2003/0191938	10/09/03	Woods et al.
39)	2003/0233542	12/18/03	Benaloh
40)	2004/0003278	01/01/04	Chen et al.
41)	2004/0039932	02/26/04	Elazar et al.
42)	2004/0103404	05/27/04	Naumovich et al.

Appl. No. 10/672,700 IDS dated May 3, 2007

43)/AS/	2004/0151306	08/05/04	Kiddy
44)	2004/0260933	12/23/04	Lee
45)	2005/0002053	01/06/05	Meador et al.
46)	6) 2005/0015454 01/20/05		Goodman et al.
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51)	2006/0026430	02/02/06	Luo
52)	2006/0048228	03/02/06	Takemori et al.
53)	2006/0218539	09/28/06	Stiemens et al.
54)	2006/0271921	11/30/06	Cronce et al.

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	DOCUMENT NUMBER	DATE	COUNTRY
1) /AS/	WO 00/75760	12/14/00	PCT
2)	WO 01/79972	10/25/01	PCT
3)	WO 02/079955	10/10/02	PCT
4)	WO 04/027678	04/01/04	PCT

OTHER DOCUMENTS

1) /AS/	Collberg et al., "Breaking Abstractions and Unstructuring Data Structures", IEEE 2005, pages 1-12 [Online]. Retrieved on September 13, 2005 from the Internet: URL: http://ieeexplore.ieee.org/xpl/absprintf.jsp?arnumber=674154 .
2) /AS	Collberg et al., "A Taxonomy of Obfuscating Transformations", / 1997, pages 1-36.
3) /AS	Mambo et al., "A Tentative Approach to Constructing Tamper- Resistant Software", ACM 1998, pages 23-33.

A PTO form 1449 listing these documents is enclosed.

1. an admission that the documents are necessarily prior art with respect to the instant invention;

Serial No. Form PTO-1449 Atty Docket No. 10/672,700 SUN040023 INFORMATION DISCLOSURE CITATION Applicant(s) IN AN APPLICATION Eduard K. de Jong Filing Date Group September 25, 2003 2135 use several sheets if necessary) U.S. PATENT DOCUMENTS EXAMINER FILING DATE SUBCLASS DOCUMENT NUMBER DATE NAMR CLASS IF APPROPRIATE INITIAL /AS/ 02/28/84 380 209 AA 4,434,436 Kleykamp et al. AB 5,913,064 06/15/99 Chen 717 108 AC 6,098,056 08/01/00 Rusnak et al. 705 75 AD 6,101,606 08/08/00 Diersch et al. 726 27 ΑE 6,175,925 01/16/01 Nardone et al. 726 22 AF 6,178,509 01/23/01 Nardone et al. 726 22 AG 6,205,550 03/20/01 Nardone et al. 726 22 07/24/01 Sigbjørnsen et al. 380 255 AH 6,266,416 ΑI 6,289,455 09/11/01 Kocher et al. 713 194 **LA** 6,308,256 10/23/01 Folmsbee 712 209 AΚ 6,334,189 12/25/01 Granger et al. 726 26 04/16/02 Schmeidler et al. AL 6,374,402 717 167 09/10/02 MΑ 6,449,721 Pensak et al. 713 171 6,480,959 11/12/02 Granger et al. 713 189 AN AO 6,594,761 07/15/03 Chow et al. 713 190 ΑP 6,615,350 09/02/03 Schell et al. 713 168 713 ΑQ 6,640,305 10/28/03 Kocher et al. 194 713 AR 11/04/03 6,643,775 Granger et al. 190 AS 6,668,325 12/23/03 Collberg et al. 713 1.94 AT 08/17/04 Chow et al. 713 189 6,779,114 FOREIGN PATENT DOCUMENTS Translation DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS YES NO /AS/ 12/14/00 PCT WO 00/75760 OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) "Breaking Abstractions and Unstructuring Data Collberg et al., /AS/ Structures", IEEE 2005, pages 1-12 [Online]. Retrieved on September 13, 2005 from the Internet: URL:http://ieeexplore.ieee.org/xpl/absprintf. jsp?arnumber=674154>. 10/14/2007 Date Considered Examiner /April Ying Shan/ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

EXAMINER: through ci to applica	tation	al if reference con if not in conforma	sidered, whet nce and not c	her or not onsidered.	citation is Include co	in conforma	nce with form with	MPEP 609; next commu	draw li nicatio
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	AT	2004/0003278	01/01/04	Chen et	· · · · · · · · · · · · · · · · · · ·	726	21	!	
	AS	2003/0233542	12/18/03	Benaloh		713	156		
	AR	2003/0191938	10/09/03	Woods e		713	165		 ,
	AQ	2003/0188187	10/02/03	Uchida		726	26		
	AP	2003/0177391	09/18/03	Ofek et	aı.	726	4		
	AO	2003/0172270	09/11/03		e et al.	713	168		
	AN	2003/0123664	07/03/03	Pedlow		380	218		·.
	AM	2003/0093685	05/15/03	Tobin		713	190		
	AL	2002/0184618	12/05/02	Bala et	al.	717	148		
	AK	7,150,003	12/12/06	 	ch et al.	717	108		
	AJ	7,127,712	10/24/06	Noble e		717	173		,
	AI	7,124,445	10/17/06		et al.	726	26		
	HA	7,089,594	08/08/06	Lal et		726	31		
	AG	7,080,039	07/18/06	Marsh		705	51		
	AF	7,065,652	06/20/06	Xu et a	1.	713	190		
	AE	7,054,443	05/30/06		ski et al.		28		
	AD	7,017,188	03/21/06	 	ler et al.		26		
	AC	6,981,217	12/27/05	Knauft		715	531		
	AB	6,966,002	11/15/05	Torrubi	a-Saez	726	29		
/AS/	AA	6,862,683	03/01/05	Wille e	t al.	713	151		
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			v.s.	PATENT D	CUMENTS				
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					SUN04002	10/672,700			
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Form PTO-1449				Atty Docket No.			Serial No.			
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/AS/	AA	2004/0039932	02/26/04	Elazar	et al.	726	26			
	AB	2004/0103404	05/27/04	Naumovi	ch et al.	717	136			
	AC	2004/0151306	08/05/04	Kiddy		380	28			
	AD	2004/0260933	12/23/04	Lee		713	193			S
	AE	2005/0002053	01/06/05	Meador	et al.	358	1.14			
	AF	2005/0015454	01/20/05	Goodman	et al.	709	207			
	AG	2005/0021995	01/27/05	Lal et a	al.	726	4			
	НА	2005/0044359	02/24/05	Eriksso	n et al.	713	165		•	
·	AI	2005/.0055564	03/10/05	Haselde	n et al.	726	26			,
	AJ	2005/0102264	05/12/05	Nason e	Nason et al.		1 .	\neg		
	AK	2006/0026430	02/02/06	Luo	-	713	176	1		
	AL	2006/0048228	03/02/06	Takemor	i et al.	726	22		-	
	AM	2006/0218539	09/28/06	Stiemen	s et al.	717	140	1		
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/AS/	AU	WO 02/079955	10/10/02	PCT						
/AS/	AV	WO 04/027678	04/01/04	PCT						
		OTHER DOCUMENT	S (Including	Author, Ti	tle, Date, F	Pertinent Pag	ges, Etc.)		
/AS/	AW	Mambo et al., Software", ACM	"A Tentativ 1998, page	re Approa es 23-33.	ch to Cons	structing	Tamper-	Resis	tant	
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Appl. No. 10/672,700 IDS dated August 30, 2007



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Eduard K. de Jong

Assignee: Sun Microsystems, Inc.

Title: PERMUTATION OF OPCODE VALUES FOR APPLICATION

PROGRAM OBFUSCATION

Serial No.:

10/672,700 Filed:

September 25,

April Ying Shan Group Art 2135

Unit:

Docket No.:

Examiner:

SUN040023

Monterey, CA August 30, 2007

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

68/64/6637 MSESREM1 6206234 16676/63

UNDER \$1.97(c) WITH FEE

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Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant(s) wish to call the following documents (a copy of each non-US Patent document is enclosed) to the attention of the Examiner.

U.S. PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	NAMB
1) /AS/	6,272,616	08/07/01	Fernando et al.
2)	6,598,166 07/22/03		Folmsbee
3)	6,609,201 08/19/03		Folmsbee
4)	6,665,796	12/16/03	Folmsbee
5)	6,675,298	01/06/04	Folmsbee
6)	6,757,831	06/29/04	Folmsbee
7)	6,789,177	09/07/04	Okada
8)	6,871,298 03/22/05		Cavanaugh et al.
9)	7,073,713	07/11/06	Silverbrook et al.

10) /AS/		7,170,999	01/30/07	Kessler et al.
11)		7,193,482	03/20/07	Silverbrook
12)		7,201,319	04/10/07	Silverbrook et al.
13)	/	2002/0120854	08/29/02	LeVine et al.

OTHER DOCUMENTS

1) /AS	Low, "Protecting Java Code via Code Obfuscation", pp 1-5 [online]. Retrieved on May 12, 2007 from the Internet: <url:http: codeob.html="" crossroads="" www.acm.org="" xrds4-3="">.</url:http:>
²⁾ /AS/	Collberg et al., "Software Watermarking: Models and Dynamic Embeddings", ACM, 1999, pages 311-324.

A PTO form 1449 listing these documents is enclosed.

Citation of the above documents shall not be construed as:

- 1. an admission that the documents are necessarily prior art with respect to the instant invention;
- 2. a representation that a search has been made, other than as described above; or
- 3. an admission that the information cited herein is, or is considered to be, material to patentability as defined in § 1.56(b).

Enclosed herewith is a check in the amount of \$180.00 payable to the Director of the United States Patent and Trademark Office, which is the amount for submission of an Information Disclosure Statement given in 37 C.F.R. § 1.17(p).

The Commissioner is hereby authorized to charge any additional fees, which may be required to consider this paper, or credit any overpayment to Deposit Account No. 50-0553.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on <u>August</u> 30, 2007 Respectfully submitted,

Forrest Gunnison
Attorney for Applicant(s)
Reg. No. 32,899

(831) 655-0880

Attorney for Applicant(s)

August 30, 2007

Date of Signature

GUNNISON, McKAY & HODGSON, LL.P. urden West Office Plaza. Soite 220 1900 Gurden Road Monterey, CA 93940 (831) 655-0880 Fax (831) 655-0888

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	AB	6,598,166	07/22/03	Folmsbe	е		713	190			
	AC	6,609,201	08/19/03	Folmsbe	е		713	187			
	AD	6,665,796	12/16/03	Folmsbe	е		713	190			
·	AE	6,675,298	01/06/04	Folmsbe	е	,	713	190			
	AF	6,757,831	06/29/04	Folmsbe	е		713	190			
	AG	6,789,177	09/07/04	Okada	•		711	164			
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	AJ	7,170,999	01/30/07	Kessler	et al.		380	277	277		
	AK	7,193,482	03/20/07	Silverb	rook		331	78	78		
	AL	7,201,319	04/10/07	Silverb	rook et a	1.	235	454			
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